

EBM Initiative Update

Paul Michel, Superintendent Monterey Bay National Marine Sanctuary

SAC Meeting, Salinas
April 19, 2012

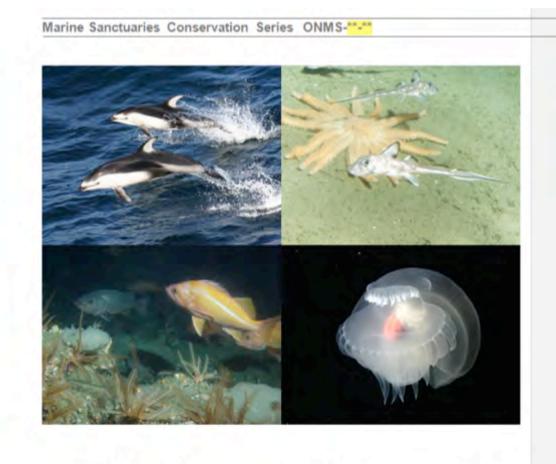
"Post EBMI" Priorities For 2012

- 1) Natural Resource Assessment June
- 2) Integrated Ecosystem Assessment Thru Dec.
- 3) EFH Review Process December

MBNMS Natural Resource Assessment

Purpose

- 1) to identify and compile sources of regional information
- 2) describe natural resources and processes in offshore marine waters of the Sanctuary to inform MBNMS management

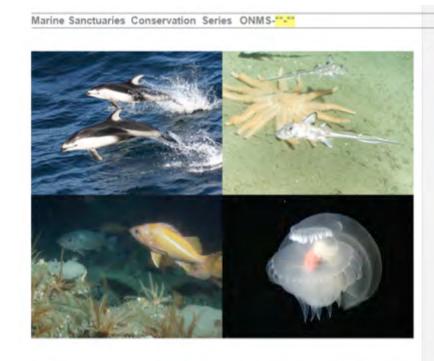


The Natural Resources of the Monterey Bay National Marine Sanctuary:

MBNMS Natural Resource Assessment

Content

- Reviews available information by habitat, communities, and ecological processes in offshore waters (e.g., productivity)
- Identifies data layers for GIS tools and products



The Natural Resources of the Monterey Bay National Marine Sanctuary:

NOAA's Integrated Ecosystem Assessment

Status of the California Current and MBNMS

- Evolving tool to synthesize and analyze scientific information & present it in a manner that informs management decisions
- Evolving to help resource managers understand the status and health of the ocean and how various management actions might influence those factors.



NOAA's IEA Producing a web-based, user friendly, interactive dynamic report

- Creating a user-friendly website
- Creating a MBNMS specific section
- Click on pieces of interest by indicator and status and trends
- Graphical representation of different real and potential management scenarios



NOAA's CC-IEA Communications Products

- 1. Website
- 2. Webinars
- 3. Videos
- 4. Reports and brochures



NOAA's Integrated Ecosystem Assessment Program





California Current

The California Current (CC) is known for strong seasonal upwelling that yields local areas of high productivity capable of supporting a wide variety of important commercially harvested shellfish and fish as well as sea birds and large marine mammals. Interannual variability in this system is influenced by two main climate drivers, the El Nino Southern Oscillation and the Pacific Decadal Oscillation. Health and productivity of this system is affected by commercial and recreational fishing, pollution, habitat degradation, shoreline alteration, logging, agriculture, urbanization, grazing, and energy production. The California Current Ecosystem (CCE) is the first in eight of the USA's Large Marine Ecosystem (LMEs) to implement NOAA's integrated Ecosystem Assessment (LEA) program.

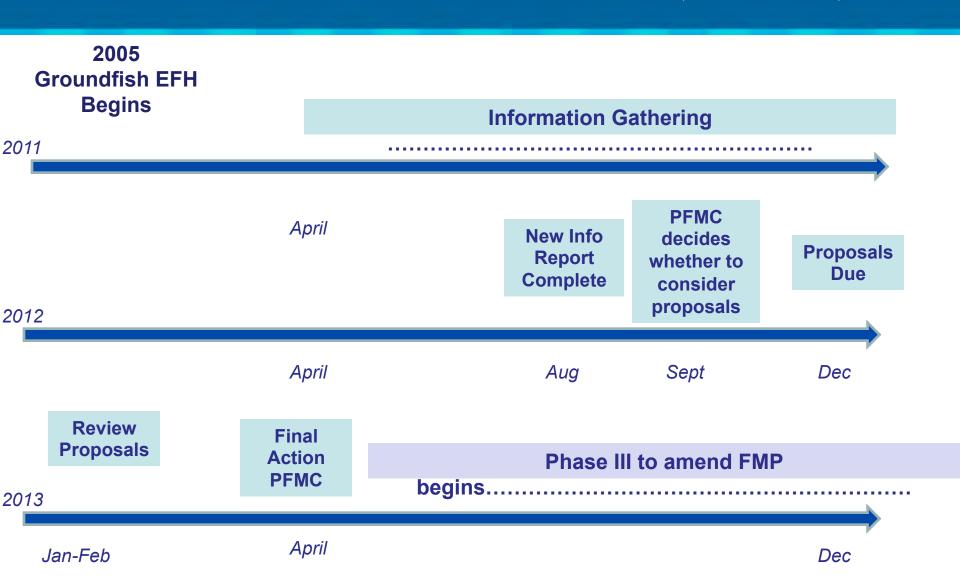
Source: www.lme.noaa.gov and Northwest Fisheries Science Center

MBNMS Goals for engaging in EFH Review

- Achieve Ecosystem-Based Management goals
 - Facilitate sustainable uses
 - Protect unique/rare features
- 2) Address conservation and multiple use needs
- 3) Refine EFH boundaries using updated information and local input
- 4) Engage in PFMC Process



Pacific Fishery Management Council Groundfish EFH Review Timeline (estimated)



MBNMS will synthesize the best available information

Coral predicted

Hard bottom

Coral found

Habitat diversity

Trawl effort

Analysis and local input (NGOs, Scientists, Fishermen

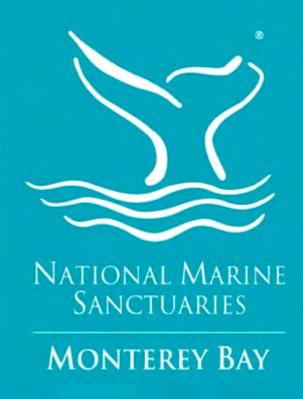
- Analysis of best available scientific information
- Incorporate additional local input
- GIS Layers

MBNMS Seeks Additional Local information on....

- Locations of benthic habitat essential to groundfish
- Locations of benthic habitat that are unique, rare, remarkable
- Locations of areas that are currently or historically of interest to trawl and fixed gear fleets
- Locations of interest for long term research or hard bottom habitat and indicator species







http://montereybay.noaa.gov